the USGA decided to manufacture the Stimpmeter. There is no doubt in my mind that the Stimpmeter is the simplest, most accurate and operator-independent instrument we have to measure the speed of greens.

The principal purpose of the Stimpmeter is to allow golf course superintendents to evaluate the effect that different cutting heights, frequency of cut, winter feeding or other putting green management treatments will have on the speed of the green. On the other hand, one can say the Stimpmeter may become a measure of effectiveness of certain agronomic treatments, and can be referred to on a national standardized basis.

A second purpose of the Stimpmeter is to provide the green superintendent with a precise method of preparing the greens on a golf course for either membership play or competition play. He may want to have consistency in green speed or even design certain inconsistencies into greens. Some greens may need to be faster in some areas than others. With the Stimpmeter, he has this capability and does not have to rely on experience with regard to his impression of slow or fast. He can then plan his work accordingly.

The introduction of the Stimpmeter was also meant to be an early warning system. Why do the greens suddenly become slower or faster? The effect of the Stimpmeter as a diagnostic tool needs to be evaluated based on data. which, if properly documented and analyzed, would show certain correlations between speed changes and potential problems.

The Stimpmeter is a tool that can be used to prepare greens for specific speeds. "Prepare" means gradual preparation to achieve certain goals, not traumatic last-minute action that may cause undue stress. In many cases, due to the grass type, climatic conditions or the undulation of certain greens, one may want to reduce the speed of the greens, or at least maintain certain maximum speeds for those conditions.

The Stimpmeter was not designed to be a speedometer. This was, in fact, one of the major fears, and because we understood that it would inevitably be used this way, we tried to limit its use by allowing only golf course superintendents and our Green Section agronomists to have access to a Stimpmeter.

Fast greens are not always good greens; although, generally, the faster

the green, the truer the putting surface. Those same features that slow the ball are also those that deflect the ball. Based on experience, we have found that a green speed in the neighborhood of 9½ to 10½ feet provides an excellent putting surface for most championships. Greens with extreme slope need to be less than 10 feet, and flat greens may be greater than 10 feet. However, any green faster than 111/2 feet should be considered too fast for some championship play and dangerous for the long life of the green if proper attention is not given.

THE STIMPMETER is here to stay. we believe. Let's not misuse it! Rather, let us develop and promote the potential benefits it has to offer. A new

instrument called an impact tester is now in the development stages. Once again, however, if it reaches the wrong hands, it may also be misused. The method of introduction must be carefully considered.

Tools to measure the quality of a green, from a player's point of view, will inevitably lead to sterilizing golf courses. This may be the curse of any new piece of equipment developed for the use of the golf course superintendent. He should have the ability to control the playing conditions of a golf course through good, sound agronomic management. He should not have to endure playing conditions that control him to the extent of having detrimental effects on the course.

A New Turf Menace

by JULIUS ALBAUGH

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THE STIMPMETER has been cussed and discussed by golf course superintendents since its conception, and the controversy has grown with time. It has been a prime item of discussion during casual conversations, and at a meeting of golf course superintendents in Illinois in December of 1981, the Stimpmeter was discussed at length.

I am not saying that what has happened with the Stimpmeter was its original purpose, but rather I am pointing out what has happened because of its existence. First, let's take the issue of the Stimpmeter and the low-handicap golf club member. Agreed, the Stimpmeter was meant as a tool for the golf course superintendent, but it has happened that the golfer himself has acquired the instrument.

The following story may seem farfetched, but it actually happened in the northern suburbs of Chicago a few years ago. A member of the Grounds and Green Committee of a neighboring country club heard about the Stimpmeter. He purchased the device along

with charts and tables. Instantly he felt he was an expert on judging the quality of putting turf. He began to experiment with his new toy at his home course, recording readings of putting green speed. After he had acquired many readings on his own greens, he decided to trespass on neighboring golf courses to compare Stimpmeter readings. I heard the fellow had visited my golf course, but I missed him! At a neighboring club he was confronted by the golf course superintendent and was lucky he was not shot!

In his spare time he visited a club or two a day, some in the mornings, others at night. He made some readings after a heavy rain, others under the driest of conditions. He did not know if the green had been mowed that day or double cut. He did not know the turfgrass variety or the height of cut. He did not know anything except how to roll a ball down an aluminum bar. When he had finished his readings, he compiled his so-called expert data and proceeded to hassle the golf course superintendent at his home golf course. It took some time, but the golf course superintendent

was finally able to put the Stimpmeterpacking trespasser in his place.

This is a perfect example of how the Stimpmeter has put some golf course superintendents under undue stress. The Stimpmeter in the hands of the amateur is a troublesome device. The tool permits development of the opinion that with it one can automatically become a judge of quality putting turf. With the published tables of green speeds, to some, a standard for putting green speed is established. The device gives the user a means to compare one green to another or greens on different golf courses to one another. What is lacking is a knowledge of turfgrass science. Many factors determine the reasons for variances in in green speed. How many golfers understand that to maintain faster greens requires a higher operating budget? Frequently the golf course superintendent is placed in a defensive situation. An attempt to explain these factors was made in an article printed in the July/ August, 1982, issue of the GREEN SECTION RECORD. Perhaps if this article had appeared earlier the present controversy would have been averted.

As a professional turfgrass manager. I know that one cannot expect the same from every putting green. Greens differ widely on a single 18-hole golf course. Different greens often have different soil mixtures, different turfgrass varieties, and different exposures to the elements. One can take any single turfgrass variety and grow it on a USGA soil mix, a 1-1-1 soil mix, or on a soil mix containing a high percentage of clay and there will be a great variety of responses to various weather conditions. Take the putting green bentgrass varieties Washington, Penncross, Congressional, Penneagle, Evansville, or the old South German mixture. They all differ to a degree in their response to height of cut, ability to withstand wet, hot, humid conditions and their reaction to stress. Many of the older golf courses do not have the same variety of turf on all greens; they have three greens of one variety, six of another, and nine of still another. You cannot standardize them and expect a club to shoot for a uniform Stimpmeter reading on all greens at all times. To do so may well be at the expense of quality turf, unless management practices are altered. In other cases, the complete rebuilding of greens may be necessary to assure faster greens and quality turf.

It is common in the Chicago area for golf course superintendents to strive to

maintain uniform, smooth, true, and green putting surfaces. We alter our management practices to the turfgrass variety, soil, and weather conditions. We may raise the height of cut during hot, humid weather to avoid scalping. We irrigate to maintain a uniform moisture level. We follow preventive fungicide programs and strive to maintain a healthy turf. Our fertility practices are based on just enough nutrients to provide continual recovery from player damage. We topdress, aerify, spike, verticut, comb, and brush as needed to assure the best possible putting surface. These practices are not based on Stimpmeter readings but, instead, on our agronomic background and on our ability to provide our membership with a uniform, true, healthy, and green putting surface. Ninety-five percent of the members at my club are not color blind; they can tell brown from green!

NEXT WE COME to actual turf abuse from too much emphasis on Stimpmeter readings. Over the years I have received a number of comments from members at my club concerning television coverage of championship golf events. These people were concerned and wondered what was wrong with the greens on many of the golf courses that hosted USGA and PGA events. They noticed the brown turf. This condition stood out well on the television coverage of the U.S. Women's Open, which was held in the Chicago area in 1981. As I understand it, on the Monday of the tournament week, the golf course superintendent was told to cut the greens according to the desired Stimpmeter readings for tournament play. It made no difference that the area had received a heavy rainfall the night before. He was instructed to go ahead, get that desired Stimpmeter reading. "Mow the greens; mow them again. We want speed!"

The results — SCALP!

Neighboring golf course superintendents that day listened to their knowledge of putting green turf and not to a Stimpmeter-packing tournament official. Most golf course superintendents in the Chicago area that day did not mow their greens because of the wet soil conditions, and their greens stayed green! To me this offers an excellent example of turfgrass abuse by the Stimpmeter. Common sense and agronomic and greenkeeping knowledge were put aside in order to establish a set Stimpmeter reading. True, not all greens were scalped that day. Not all were the same — different grasses, different soils. The sad part is that the majority of the greens shown on television were the greens that were scalped the most.

Was this fair to the membership of the host club to have this view shown of their club? Was it fair to them to be forced to play on recovering greens for the rest of the season? Being a golf course superintendent myself, I can imagine how the host superintendent felt: his heart was most likely broken. Yet the Stimpmeter is called a useful tool.

I feel fortunate. I have not personally been confronted with the Stimpmeter. But I see it as an instrument that is doing harm to the golf course superintendent. This harm has come in the promotion of the Stimpmeter, the placing of it into the hands of the sidewalk superintendent, and the unfortunate logic that the faster the putting surface, the better, even if the turf will not tolerate it.

It seems unfair to me that so much emphasis is placed on the requirements of the low-handicap golfer. Sure the touring pro and the under 5-handicap golfer claim they putt better on faster greens. But it seems to me that 90 percent of the membership at 99 percent of the golf courses do not fit into this class. The majority of the golfers like a putt that they feel they can control. It makes the game more enjoyable for them. Most golfers also love the color green. Brown makes them feel that something is wrong. Brown goes with trouble; the more brown the member of a golf club sees, the more trouble the superintendent is in. There is that old saying of golf course superintendents: "When the grass is green, you are a hero; when it is brown, you are a bum!" This old saying still holds true today in the eyes of the average club member.

The USGA has been beneficial for the golf course superintendent over the vears. I have read the Green Section RECORD for over 19 years and still look forward to each issue. I have had problems, and the articles have helped me solve them. But this Stimpmeter business is not in the best interest of the golf course superintendent, and it is not being received well. As it is, the golf course putting green is the most intensely cultivated crop in the world. Nowhere do we find a plant continually put under such stress, and now we have the Stimpmeter to stress our golfing turf further. I cannot help but feel that Stimpmeters are anti-grass.